PATENT COOPERATION TREATY



From the INTERNATIONAL BUREAU

NOTIFICATION OF TRANSMITTAL OF COPIES OF TRANSLATION OF THE INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (CHAPTER) OR CHAPTER II OF THE PATENT COOPERATION TREATY)

(PCT Rules 44bis,3(c) and 72.2)

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Date of mailing (day/month/year) 26 October 2006 (26.10:2006)	
Applicant's or agent's file reference 665138	IMPORTANT NOTIFICATION
International application No. PCT/JP2005/005401	International Gling date (day/month/year) 24 March 2005 (24.03.2005)
Applicant DAINIPPON SUMITOMO	PHARMA CO., LTD. et al

		translation	

The International Bureau transmits herewith a copy of the English translation of the international prelimit ary report of patentability (Chapter I).
The International Bureau transmits herewith a copy of the English translation of the international prelimitrary report of patentability (Chapter II).

I Transmittal of the copy of the translation to the designated or elected Offices.

The International Bureau notifies the applicant that copies of that translation have been transmitted to the following designated or elected Offices requiring such translation:

None

The following designated or elected Offices, having waived the requirement for such a transmittal at this time, will receive copies of that translation from the International Bureau only upon their request

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Reminder regarding translation into (one of) the official language(s) of the elected Office(s).

The applicant is reminded that, where a translation of the international application must be furnished to an elected Office, that translation must comain a translation of any amexes to the international preliminary report on patentability (Chapter II).

It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned within the applicable time limit (Rule 74.1). See Volume II of the PCT Applicant's Guide for further details.

Authorized officer

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference 665138	FOR FURTHER ACTION	See item 4 heliow.	
International application No. PCT/JP2005/005401	International filing date (day/momh/year) 24 March 2005 (24.03.2005)	Priority date (day/month/year) 26 March 2004 (26.03.2004)	~~~
International Patent Classification (88 See relevant information in Form F	n edition unless older edition indicated) PCT/ISA/237		
Applicant DAINIPPON SUMITOMO PHARM	A CO., LTD.		

l.	This international preliminary International Searching Author	eport on patentability (Ch ity under Rule 44 <i>bis</i> .1(a).	apter I) is issued by the International Bureau on behalf of the
di G	This REPORT consists of a tot In the attached sheets, any refe to the international preliminary	rence to the written opinio	n of the International Searching Authority should be read as a reference
3.	This report contains indication Box No. I Box No. II Box No. III	Explaine to the following Basis of the report Priority	
	Box No. IV Box No. V Box No. VI Box No. VII Box No. VIII	applicability: chations Certain documents cit Certain defects in the	inder Article 35(2) with regard to movelty, inventive step or industrial sand explanations supporting such statement
4.	The International Bureau will a not, except where the applican date (Rule 44bis .2).	communicate this report to makes an express request	designated Offices in accordance with Rules 44 <i>bis</i> .3(c) and 93 <i>bis</i> .1 but under Article 23(2), before the expiration of 30 mornths from the priority
i	The International Bir 34, chemin des Ci 1211 Geneva 20, 5 mile No. +41 22 338 82 70 PCT/IB/373 (January 20(4)	iom bette:	Date of issuance of this report 19 October 2006 (19.10.2006) Authorized difficer Yoshiko Kuwahara e-mail: pt07@wipo.int

PATENT COOPERATION TREATY

From the INTERNATIONAL SEARCHING AUTHORITY To:



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			777777		RITTEN OPINION OF T TIONAL SEARCHING A	THE
					(PCT Rule 43bis.17	
				Date of mailing this/month/yeur)		
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665	5138				See paragraph 3 below	
	tional application No. C/JF2005/0054(01	imernational filing date 24.03.2005	(dicymenth/veiii)	Priority date (day/mont/z/yes)	ing.
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	Box No. VIII	Certain obse	ervations on the internation	mal application		
2,	FURTHER ACTION					
	- international Preliminary i	axamining , A and the	Authority ("IPEA") exces chosen IPEA has notifici	ot that this does not a 5 the International Bi	vill be considered to be a wri pply where the applicant choise treat under Role (0, 1614 b.) tha	er an American ather
	If this opinion is as provi written raply together, wi PCT/ISA/220 or before the	ided above here appacy e expiration	considered to be a write mate, with amendments, of 22 months from the p	en opinion of the IPE	5A, the applicant is invited to s on of 3 months from the clate or expiret later.	ubmit to the IPF(A a of mailing of Form
	For further options, see Fo	um PC17iS.	PM 220].			
3.	For further details, see not	es to Form	PC17(SA/220)			
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WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCI/JP2005/005401

1	Box	No.3	Basis of this opinion
	1.	With	regard to the language, this opinion has been established on the basis of the international application in the Language in which it was unless otherwise indicated under this tiem.
			This opinion has been established on the basis of a translation from the original language into the following language
		`~	which is the language of a translation lumished for the purposes of international resent tunder
			Bake 12.2 and 23. Rb31.
-	2.	With	regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed atton, this opinion has been established on the basis of:
-		· 2.	type of material
			a sequence liming
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		ъ.	format of material
			in written terms:
The second second			in computer readable form.
		æ,	time of filing/formishing
			contained in the international application as fired.
			filed together with the international application in computer readable form
			Isotished subsequently to this Authority for the purposes of search.
		 -	
	3.		In addition, in the case that more than one version or copy of a sequence liating undow table(s) relating thereto has been fixed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filled or does not go beyond the application as filled, as appropriate, were furnished.
	4:	Addi	tional commissis:
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WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

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International application No.

PCT/JF2005/005401

liox No. 11	Non-establishment of option	n with regard to novelty, inventive step and industrial applicability
The questi applicable	ons whether the claiment invention as have not been examined in respect of	means to be povel to involve an inventive step (to be non-obvious), or to be industrially
	the entire international application	
\boxtimes	ciama Nov 16, 19, 20	
because	**	
	the said international application, or threalact to the following subject matter w	e said claims Nos. 16, 19, 26 thich does not require an international preliminary examination (specify).
	The inventions describ the human body by therap	ped in claims 16, 19, and 20 relate to methods for treatment of y.
	the description, classes or drawings are so unstear that no meaningful equal	dicase particular ciements believe) sa said shima Vas. on could be seemed (specify):
	the claims or said claims Nos. by the description that no meaningful	greeso i nadequately supported
\square	no international search report has been	established for said claims Nos. 15, 19, 20
		ence listing does not comply with the standard provided for in Annex C of the Administrative
	the written form	has not been furnished
	tive computer readable (orm)	does not comply with the standard has not been furnished does not comply with the standard
	the tables related to the nucleotide an technical requirements provided for in	d/or smino acid sequence listing, if in computer resoluble teem only, do not comply with the Aunex C-bis of the Administrative Instructions.
	See Supplemental Box for further deta	Dy.

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

Insertactional application No.
PCT/JP2005/005401

j.	ritations and expli Statement			
	Novelty (N)	Claims 1-15,	17, 48, 21-25	TES
		Claims		NO
	Inventive step (18)	Claims 10		YES
		Claims 1-9, 1	11-15, 17, 18, 21-25	NO NO
	Industrial applicatellity (IA)	Claims 1-15,	17, 18, 21-25	yës.
		Claims		NO

- 2 Citations and explanations:
 - 1. WO 99/28321 A1
 - WO 02/04449 A2

J. Claims 1-9, 11-15, 17, 18, and 21-25

The inventions described in claims 1-9, 11-15, 17, 18, and 21-25 do not appear to involve an inventive step based on documents 1 and 2.

Document I describes compounds represented by the general formula (I) useful as antiviral drugs, anticancer drugs, immune disease treatment agents, and so on, and production methods thereof.

In turn, document 2 describes a purine compound useful as an anti-HIV agent, anticancer drug, and so on, and describes said compound as having a substituent corresponding to the 9-position substituent in formula (1) of the present application in the 9 position (see claim 1; description relating to definitions of L and B in line 1 on page 25 to line 4 on page 26: 9-position substituents in compounds of formulas (1), (V), and (IX), etc.).

Consequently, the use of substituents described in document 2 as 9-position substituents in compounds described in document 1 is considered to a matter that could be easily achieved by a person skilled in the art.

II. Claim 10

L. Dengration of English Program for a

The invention described in claim 10 appears to possess novelty and involve an inventive step over documents 1 and 2.

Documents 1 and 2 neither describe nor suggest the compounds in claim 10 of the present application; in addition, from the descriptions of table 30 in example 12 in the present application, said compounds are considered to achieve exceptional effects that could not be anticipated by a person skilled in the art from the descriptions of documents 1 and 2.